

Welcome to our Product News page. Here we feature new products of interest to the gear and gear products markets. To get more information on these items please circle the Reader Service Number shown.



Flame Treating Systems Introduces New Flame-Treating Machine

Oliver Gear of Buffalo, NY, is now hardening gear teeth on a machine built by Flame Treating Systems, Inc., that treats the flanks of teeth ranging in size from 1 to 4 diametral pitch. Usually used for pinions on reducers, the gears range in size from 18 to 52 cut teeth, 13.64 to 54.67 inches in diameter and from 2.5 to 4.5 inches thick with weights of 80 to 3,500 pounds.

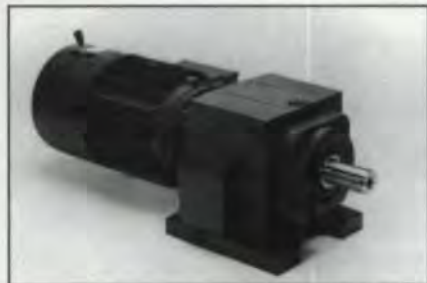
The teeth, SAE 4140-4150 steel, are hardened to 500-600 Brinell to depths of 0.125 inches on the pitch line without hardening the gear hub. The process also strengthens the teeth by creating internal compression stresses that counteract external tension stresses. Original and operating costs of the FTSI machine are considerably less than those for a comparable induction heating system.

The machine's components include two water quenched brass flame heads with either 1 inch or 3/4 inch heating width; a cabinet with controls for the flow of oxygen and fuel, flame temperature and heating time; a yoke assembly for the heads; a water-cooled, high-capacity heating torch mounted in a BUG-O scanning mechanism holder; a quench collection tank with pumps, heater and manual turntable with stops; and a fan-style heat exchanger with a 1-hp pump. The gears rest on a free-spinning turntable that is locked in place by a spring-loaded V-block inserted between teeth, then manually retracted after the heating of each tooth is complete. The rate of movement of the flame heads along the teeth is automatically

controlled. The hardening times per tooth range from 1 to 2 minutes at pressure gage settings of 50 psi for oxygen and 20 psi for fuel.

For more information contact Mark Serrine at FTSI at (800) 435-5312 or by fax at (919) 956-5057.

Circle 301



Dodge Introduces New Modular High-Torque Gear Drive

Dodge has unveiled its new line of Quantis In-Line Helical (ILH) gearmotors and reducers. The Quantis ILH offers the most advanced helical gear and design technology on the market. It is specifically engineered to deliver higher torque performance in a compact housing. Quantis features a complete modular design to ensure shorter delivery cycles. Its one-piece case construction is designed to optimize overhung loads while its all ground gearing provides greater power with lower noise. Quantis ILH gear drives deliver efficiency ratings up to 97%.

With Quantis, users can now downsize and still achieve higher horsepower ratings size for size, ensuring improved cost containment and process reliability. Output torque ratings are up to 14,870 inch-pounds, with input power ranges from 1/4 horsepower to 20 horsepower. More than 2 million combinations are possible from stock and non-stock parts, and Quantis is dimensionally interchangeable with major global competitors.

For more information on the new line of Dodge Quantis ILH gearmotor and reducer, call Rockwell Automation Power Systems at (864) 297-4800 or fax (864) 281-2433 and request literature DMR-1987-1.

Circle 302



Special Racks and Pinions Eliminate Need to Design Around Standard Gear Components

Design engineers can design mechanical movements into their equipment more practically using custom made racks and pinions rather than designing around a standard gear component. These special pinions and racks, manufactured by Rack and Pinion, Inc., are often more cost effective than standard components. What's more, these components can be made in less than a week (4-6 weeks is standard).

Pinions are available up to 6-inch outside diameter with shaft lengths up to 10 feet. Racks can be ordered in lengths to meet specific requirements. A wide range of materials, heat treating and noncorrosive plating is available.

"Now an engineer can specify a rack and pinion that fits his design rather than trying to design around a standard rack and pinion," said Jim Geisman, Rack and Pinion, Inc. CEO. "Glass cutters find the quality of the special rack teeth and gears provide smoother cutting head travel for better accuracy during the cutting process. Plus, die and injection mold makers appreciate a rack and pinion making source that helps them solve special part ejector applications along with delivering a quality product when promised."

A 16-page catalog is available. To obtain a copy, or to receive more information, contact Rack and Pinion, Inc., at (800) 722-5008 or by fax at (517) 563-8874.

Circle 303

Pinpoint Accuracy in CNC Inspection

A CNC inspection machine capable of measuring wormwheel gear cutting hobs and flytools has now been developed by Holroyd. Calibration results have confirmed the measurements of this machine to within 2-3 microns. This machine pinpoints the profile, pitch, lead and divide of hobs as well as relevant vital details for single-point flytools.

For inspection, the cutting tool is placed in the machine's vertical axis and

then measured by a contact probe linked to encoders. Stepper motors position the probe and enable digitized measurement information to be fed into a computer. This gives the operator detailed readouts of tool condition both on-screen and in the form of printed statistics and graphs. This piece of equipment is being used by Holroyd to help manufacture new hobs by verifying accuracy, monitoring tool wear and confirming the accuracy of the resharpening

process, and by producing digital representations of the profiles to simulate the contact condition generated by the cutter using computer modeling techniques.

For more information about the CNC inspection machine, contact Holroyd at ++(44) 1706-526590 or visit their Web site at www.holroyd.com.

Circle 304



Roundness Measuring Machine has Style and Substance

New from Taylor Hobson, the Talyrond 265 marks a radical departure in precision instrument design. Not only does it have many performance enhancements such as high accuracy vertical straightness, it also blends engineering excellence with ergonomics and aesthetics. This is the first in a new series of inspection machines that is designed to increase overall ease of use while decreasing overall cost of ownership.

All functional elements, from the control panel to the software, rely on "intuitive recognition logic" to guide even the casual operator through complete measuring tasks. Installation or relocation of the Talyrond 265 is safe and easy thanks to built-in lifting bars and even distribution of weight. Routine calibration and alignment procedures have been simplified to greatly reduce the cost of certification and maintenance.

Improved manufacturing techniques provide the customer with the combined benefits of lower initial cost and increased

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HURTH MODUL

Innovative technology for GEAR HOBBING and BEVEL GEAR CUTTING

CNC actuation and reduced set-up times characterize the HURTH MODUL machines, engineered with German precision. Designed to be flexible for a variety of cutting methods while enduring rugged usage, compact HURTH MODUL machines offer optional automation with CNC-controlled digital drives. Call today for details.



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CIRCLE 129



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CIRCLE 136

flexibility. The Talyrond 265 is built around a modular concept, which means fewer discrete components while still providing a wide selection of options and accessories. Choose a 300 mm or 500 mm measuring column, manual or automatic centering and leveling and position or measuring horizontal axis. The machine is fully CNC programmable. Contact Taylor Hobson at (800) 872-7265.

Circle 305

Technical Data Sheet for Compact Multi-Speed Gear Transmissions

A technical data sheet featuring photos and diagrams of a series of multi-speed drives from Andantex USA, Inc. describes the great versatility of their performance capabilities. The units are 96% efficient with a rated life span of 10,000 hours. The units have precision ground gears, splines and housings that can withstand 24-hour-a-day operation.

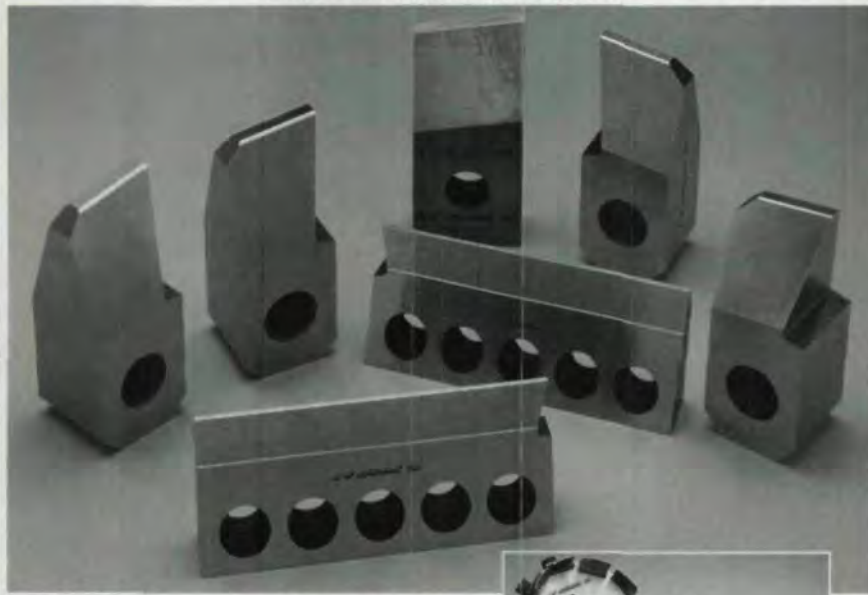
The data sheet describes the variety of configurations possible when the units are coupled in tandem, allowing overall length to be held to a minimum in a more compact design than can be achieved with standard gearboxes. Available in seven sizes, the units offer a 5 to 800 HP range, with constant horsepower at each ratio. The units have input speeds of 2000 RPM and 12 to 288 speed changes are available by coupling four units. These units may be equipped with either standard or special ratios.

Copies of the Multi-Speed Drive data sheet are available from Andantex U.S.A., Inc., 1705 Valley Road, Wanamassa, NJ, 07712 or log on to their Web site at www.andantex.com for further information.

Circle 306

NEW! NOW YOU HAVE ANOTHER CHOICE...

and it's made in AMERICA!



A/W Systems Co. announces that it is now a manufacturing source of spiral gear roughing and finishing cutters and bodies.

We also can manufacture *new* spiral cutter bodies in diameters of 5" through 12" at present.

A/W can also supply roughing and finishing cutters, hardware and replacement parts for most 5"-12" diameter bodies.

Whether it's service or manufacturing, consider us as an alternative source for replacement parts and hardware as well as bodies and cutters.

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NEW! Straight Bevel Cutters.



Royal Oak, Michigan 48067
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CLC Lubricants Introduces New Cutting Oil

Introduced as an alternative to water based coolants, CLC's new Chem Cut HX CNC 11 NS is a low smoke cutting oil for CNC machines that is designed to work with all metals including brass, aluminum, tool steel, stainless steel, titanium and all high alloy steels. The oil is made with a special, high quality base stock containing biodegradable natural additives. The major benefit of this product is that it produces minimal smoke, even when removing large amounts of metal.

Red in color, the oil is odorless and contains no sulfur or chlorine. Also, it has a flash point greater than 500°F and a fire point greater than 550°F with a viscosity index of 208.

For more information about Chem Cut HX CNC 11 NS, contact Paul LaGrippe at CLC Lubricants Company at (800) 543-0505 or by fax at (630) 232-7915.

Circle 307

Send your new product releases to:

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